ITW

a PTO did not receive

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22333-1450, on the date shown below.

Dated: March 25, 2005

(Sharon M. Signich)

Docket No.: 01017/40451B (PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:

Brockhaus et al.

Confirmation No.: 5612

Application No.: 08/444,790

Art Unit: 1646

Filed: May 19, 1995

Examiner: J. Murphy

For:

HUMAN TNF RECEPTOR

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT (IDS)

MS Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR §§1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. It is submitted that the Supplemental Information Disclosure Statement is in compliance with 37 CFR §1.98 and the Examiner is respectfully requested to consider the listed references. Copies of the documents identified on the enclosed PTO/SB/08 form are enclosed, except for copies of the U.S. patent documents which are not enclosed.

In accordance with 37 CFR §1.97(g), the filing of this Supplemental Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. In accordance with 37 CFR §1.97(h), the filing of this Supplemental Information Disclosure Statement shall not be construed to be an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

03/29/2005 SLUANG1 00000001 132855 08444790

01 FC:1806

180.00 DA

Application No.: 08/444,790 Docket No.: 01017/40451B

This Supplemental Information Disclosure Statement is being filed after the mailing date of the first Office Action on the merits. Our check in the amount of \$180.00 covering the fee set forth in 37 CFR §1.17(p) is enclosed. However, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith to our Deposit Account No. 13-2855, under Order No. 01017/40451B. A duplicate copy of this paper is enclosed.

Dated: March 25, 2005

Respectfully submitted,

Sharon M. Sintich

Registration No.: 48,484

MARSHALL, GERSTEIN & BORUN LLP

233 S. Wacker Drive, Suite 6300

Sears Tower

Chicago, Illinois 60606-6357

(312) 474-6300

Attorney for Applicant

MAR 2 8 2005 55

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Complete if Known Substitute for form 1449A/B/PTO 08/444,790-Conf. #5612 Application Number **INFORMATION DISCLOSURE** May 19, 1995 Filing Date STATEMENT BY APPLICANT Manfred Brockhaus First Named Inventor Art Unit 1646 (Use as many sheets as necessary) J. Murphy **Examiner Name** Sheet 1 of 8 Attorney Docket Number 01017/40451B

		Document Number		TENT DOCUMENTS	Pages, Columns, Lines, When
xaminer nitials*	Cite No.1	Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
	A11	08/478,995	N/A	Lauffler, Leander et al.	
	A12	2003/064480	04-03-2003	Lauffler, Leander et al.	
	A13	4,593,002	01-11-1982		
	A14	4,675,285	09-19-1984	Clark et al.	
	A15	4,729,326	03-08-1988	Richter	
	A16	4,769,326	09-06-1988		
	A17	4,894,439	01-16-1990	Dorin et al.	
	A18	4,912,044	03-27-1990	Jacob et al.	
	A19	4,935,233	06-19-1990	Bell et al.	·
	A20	4,963,354	10-06-1990	Shepard et al.	
	A21	4,965,271	10-23-1990		
* * * * * * * * * * * * * * * * * * * *	A22	5,055,447	10-08-1991	Palladino et al.	
	A23	5,073,627	12-17-1991	Curtis et al.	***
	A24	5,075,222	12-24-1991	Hannum et al.	
	A25	5,098,702	03-24-1992	Zimmerman et al.	
	A26	5,098,833	03-24-1992		
	A27	5,118,500	06-02-1992		
	A28	5,136,021	08-04-1992		
	A29	5,155,027	10-13-1992	Sledziewski et al.	
	A30	5,211,395	06-29-1993	Gero	,
-	A31	5,211,945	05-18-1993		
	A32	5,225,538	07-06-1993	Capon et al.	
	A33	5,258,498	11-02-1993	Huston et al.	
	A34	5,264,416	11-23-1993	Park et al.	
	A35	5,270,038	12-14-1993	Klimpel et al.	
	A36	5,336,603	08-09-1994	Capon et al.	
	A37	5,350,683	09-27-1994	Sims et al.	· · · · · · · · · · · · · · · · · · ·
	A38	5,359,032	10-25-1994	Dayer et al.	
	A39	5,447,851	09-05-1995	Beutler et al.	· <u>·</u>
	A40	5,455,165	10-03-1995	Capon et al.	-
	A41	5,478,925	12-26-1995	Wallach et al.	
	A42	5,512,544	04-30-1996	Wallach et al.	
	A43	5,514,582		Capon et al.	
	A44	5,599,905	02-04-1997	Mosley et al.	
	A44 A45	5,605,690	02-04-1997	Jacobs et al.	
	A46	5,610,279	03-11-1997	Brockhaus et al.	
	A47	5,633,145		Feldmann et al.	
	A47	5,639,597	06-17-1997	Lauffer et al.	
				Wallach et al.	
	A49 A50	5,695,953			
		5,705,364 5,721,121	02 24 4000	Etcheverry et al. Etcheverry et al.	
	A51 A52				
		5,808,029	09-15-1998	Brockhaus et al.	
	A53	5,811,261	09-22-1998	Wallach et al.	
	A54	5,863,786	01-26-1999	Feldmann et al.	
	A55	5,945,397	08-31-1999	Smith et al.	
	A56	<u> </u> 5,981,701	11-09-1999	Wallach et al.	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

s	ubstitute for form 1449A/B/P	то		Complete if Known		
				Application Number	08/444,790-Conf. #5612	
	NFORMATIO	N DIS	SCLOSURE	Filing Date	May 19, 1995	
;	STATEMENT BY APPLICANT			First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
	(Use as many s	heets as	necessary)	Examiner Name	J. Murphy	
Shee	t 2	of	8	Attorney Docket Number	01017/40451B	

	A57	6,143,866	11-07-20	00 Brewer e	t al.		
	A58	6,165,476	12-26-20				
	A59	6,201,105	03-13-20	01 Smith et	al.		\neg
	A60	6,541,610	04-01-20	03 Smith			\Box
	A61	6,541,620	04-01-20		t al.		
	A62	6,572,852	06-03-20		al.		
	A63	RE 36,755	06-27-20	00 Smith et	al.		
	•		FOREI	GN PATENT	DOCUMENTS		
		Foreign Patent Docu	ment	Publication	Name of Patentee or	Pages, Columns, Lines,	
Examiner Initials*	Cite No. ¹	Country Code ³ -Number ⁴ -Ki known)	nd Code ⁵ (if	Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T⁵
	B17	AU 58976		01-24-1991	Synergen, Inc.		
	B18	EP 120694		10-03-1984	Boss et al.		
	B19	EP 227110		07-01-1987	Satoshi et al.		
	B20	EP 230574		08-05-1987	Ruddle		
	B21	EP 269455		06-01-1988	Ikeyama et al.		
	B22	EP 325262		07-26-1989	Seed		
	B23	EP 414178		02-27-1991	Seed		
	B24	EP 417563		03-20-1991	Brockhaus et al.		
	B25	EP 460846		12-11-1991	Sims et al.		
	B26	EP 471701		02-26-1992	Lemarie et al.		
	B27	EP 526452		02-10-1993	Capon et al.		
	B28	EP 526905		02-10-1993	Wallach et al.		
	B29	EP 568925		11-10-1993	Wallach et al.		
	B30	EP 606869		07-20-1994	Wallach et al.		
	B31	GB 2 246 569		02-05-1992	Feldman et al.		
	B32	JP 02-154695	4	06-14-1990	Brockhaus et al.		
<u> </u>	B33	JP 61-293924		12-24-1986	Yojiro et al.		
	B34	WO 91/02078		02-21-1991	Rathjen et al.		
	B35	WO 91/08298		12-13-1991	Capon et al.		
	B36	WO 91/17184		11-14-1991	Carter		
	B37	WO 92/08495		05-29-1992	Gillies		
	B38	WO 92/13095		08-06-1992	Carmichael et al.		
	B39	WO 93/07863		04-29-1993	Mullarkey		
	B40	WO 93/19777		10-14-1993	Smith		
	B41	WO 94/06476		03-31-1994	Smith et al.		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS							
Exa Cite	Include name of the author (in CAPITAL LETTERS), title of the article (w	hen appropriate	, title of the item (book,				
Examiner		Date					
Signature		Considered					

	PTO/SB/08a/b (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.								
Sub	stitute for form 1449A/B/PT	0		Complete if Known					
				Application Number	08/444,790-Conf. #5612				
-10	IFORMATION	I DI	SCLOSURE	Filing Date	May 19, 1995				
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Manfred Brockhaus				
				Art Unit	1646				
(Use as many sheets as necessary)				Examiner Name	J. Murphy				
Sheet	3	of	8	Attorney Docket Number	01017/40451B				

miner Initial s	No. ¹	magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C35	ABRAHAM et al., p55 Tumor Necrosis Factor Receptor Fusion Protein in the Treatment of Patients With Severe Sepsis and Septic Shock: ΔΔΔΔ JAMA, 19:1531-1538 (1997)	
	C36	ABRAHAM et al., Lenercept (p55 Tumor Necrosis Factor Receptor Fusion Protein) In Severe Sepsis and Early Septic Shock: A Randomized, Double-Blind, Placebo-Controlled, Multicenter Phase III Trial With 1,342 Patients, Crit Care Med, 29:503-510 (2001)	
	C37	AGGARWAL et al., Characterization of Receptors for Human Tumour Necrosis Factor and Their Regulation by γ-Interferon, Nature, 318:665-667 (1985)	
	C38	AGGARWAL et al., Induction of Receptors for Tumor Necrosis Factor-α by Interferons Is Not a Major Mechanism for Their Synergistic Cytotoxic Response, J. Biol. Chem., 262:10000-10007 (1987)	
	C39	AGGARWAL et al., Human tumour necrosis factors: structure and receptor interactions, in Tumor necrosis factor and related cytotoxins, pp 39-51, (Ciba Foundation symposium 131), Wiley, Chichester (1987)	
	C40	ARENZANA-SEISDEDOS et al., Immunoregulatory Mediators in the Pathogenesis of Rheumotoid Arthritis, Scand. J. Rheumatol., Supplement 66:13-17 (1987)	
	C41	ARUFFO et al., Molecular Cloning of a CD28 cDNA by a High-Efficiency COS Cell Expression System, Proc. Natl. Acad. Sci. USA, 84:8573-8577 (1987).	
	C42	ASHKENAZI et al., Protection Against Endotoxic Shock by a Tumor Necrosis Factor Receptor Immunoadhesin, Proc. Natl. Acad. Sci., U.S.A. 88:10535-10539 (1991)	
	C43	AYALA, Modern Genetics, Benjamin/Cummings, Publ. Co., Menlo Park CA, p. 45, (1980)	
	C44	BAGLIONI et al., Binding of Human Tumor Necrosis Factor to High Affinity Receptors on HeLa and Lymphoblastoid Cells Sensitive to Growth Inhibition, J. Biol. Chem., 260:13395-13397 (1985)	
	C45	BENJAMINI et al., Antibody Structure, in Immunology: A Short Course, 3rd ed., Wiley-Liss New York, 61-69 (1996)	
	C46	BRANELLEC et al., TNF: Antitumoral Agent at the Border Lines of Immunity and Inflammation, Path. Biol., 39:230-239 (1991)	
	C47	BROCKHAUS et al., Identification of Two Types of Tumor Necrosis Factor Receptors on Human Cell Lines by Monoclonal Antibodies, Proc. Natl. Acad. Sci. USA, 87:3127-3131 (1990)	
	C48	CARTER et al., Purification, Cloning, Expression and Biological Characterization of an Interleukin-1 Receptor Antagonist Protein, Nature, 344:633-638 (1990)	
	C49	CARPENTER et al., Epidermal Growth Factor, J. Biol. Chem., 265:7709-7712 (1990)	
	C50	CARPENTER, Receptors For Epidermal Growth Factor And Other Polypeptide Mitogens, Ann. Rev, Biochem., 56:881-914 (1987)	
	C51	CASADEI et al., Expression and Secretion of Aequorin as a Chimeric Antibody by Means of a Mammalian Expression Vector, Proc. Natl. Acad. Sci., U.S.A. 87:2047-2051 (1990)	
	C52	COFFMAN et al., The Role of Helper T Cell Products in Mouse B Cell Differentiation and Isotype Regulation, Immunol. Rev., 102:5-28 (1988)	
	C53	CREASEY et al., A High Molecular Weight Component of the Human Tumor Necrosis Factor Receptor is Associated With Cytotoxicity, Proc. Natl. Acad. Sci. USA, 84:3293-3297 (1987)	
	C54	DAYER, Chronic Inflammatory Joint Diseases: Natural Inhibitors of Interleukin 1 and Tumor Necrosis Factor α, J. Rheumatol, 18 (Suppl. 27): 71-75 (1991)	
	C55	DOWER et al., Human Cytokine Receptors, J. Clin. Immunol., 10:289-299 (1990)	
	C56	EISENBERG et al., Primary Structure and Functional Expression From Complementary DNA of a Human Interleukin-1 Receptor Antagonist, Nature, 343:341-346 (1990)	
	C57	ELLISON et al., The Nucleotide Sequence of A Human Immunoglobulin Cγ1 Gene, Nucleic Acids Res. 10(13): 4071-79 (1982)	
	C58	ESMON, The Roles of Protein C and Thrombomodulin in the Regulation of Blood Coagulation, J. Biol. Chem., 264:4743-4746 (1989)	

Examiner	Date	
Signature	Considered	

PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Sub	stitute for form 1449A/B/PT	0		Complete if Known		
				Application Number	08/444,790-Conf. #5612	
IN	IFORMATION	I DI	SCLOSURE	Filing Date	May 19, 1995	
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
	(Use as many sh	eets as	s necessary)	Examiner Name	J. Murphy	
Sheet	4	of	8	Attorney Docket Number	01017/40451B	

C59	European Search Report for EP 97 12 0664, dated 3/9/98	
C60	FELL et al., Genetic Construction And Characterization Of A Fusion Protein Consisting Of A	
	Chimeric F(ab') With Specificity For Carcinomas And Human IL-2, J. Immunol., 146:2446-2452	
	(1991)	
C61	FERNANDEZ-BOTRAN et al., A Soluble, High-Affinity, Interleukin-4-Binding Protein is Present in	_
	the Biological Fluids of Mice, Proc. Natl. Acad. Sci., 87:4202-4206 (1990)	
C62	FERNANDEZ-BOTRAN, Soluble Cytokine Receptors: Their Role in Immunoregulation, The	_
1	FASEB Journal, 5:2567-2574 (1991)	
C63	FERRANTE et al., Inhibition of Tumour Necrosis Factor Alpha (TNF-α)-Induced Neutrophil	_
	Respiratory Burst by a TNF Inhibitor, Immunology, 72:440-442 (1991)	
C64	FISHER et al., Cloning And Expression Of Human Tissue Factor cDNA, Thrombosis Research,	
	48:89-99 (1987)	
C65	FOLEY et al., An Inhibitor of the Toxicity of Tumour Nectrosis Factor in the Serum of Patients	
	With Sarcoidosis, Tuberculosis and Crohn's Disease, Clin. Exp. Immunol, 80:395-399 (1990)	
C66	FOMSGAARD et al., Preliminary Study on Treatment of Septic Shock Patients With	_
	Antilipopolysaccharide IgG from Blood Donors, Scand. J. Infect. Dis., 21:697-708 (1989)	
C67	GARCIA et al., High Sensitivity of Transgenic Mice Expressing Soluble TNFR1 Fusion Protein to	
	Mycobacterial Infections: Synergistic Action of TNF and IFN-γ in the Differentiation of Protective	
	Granulomas, Eur. J. Immunol., 27:3182-3190 (1997)	
C68	GASCOIGNE et al., Secretion of a Chimeric T-Cell Receptor-Immunoglobulin Protein, Proc. Natl.	_
	Acad. Sci USA, 84:2936-2940 (1987)	
C69	GEHR et al., Both Tumor Necrosis Factor Receptor Types Mediate Proliferative Signals In	
	Human Mononuclear Cell Activation, J. Immunol., 149:911-917 (1992).	
C70	GILLIES et al., Targeting Human Cytotoxic T Lymphocytes To Kill Heterologous Epidermal	_
. 0,0	Growth Factor Receptor-Bearing Tumor Cells, J. Immunol., 144:1067-1071 (1991)	
C71	GOODMAN, Identification of Antigenic Determinants, in Basic & Clinical Immunol., 24-25 (1982)	
C72	GOODMAN, Immunogenicity & Antigenic Specificity, in Basic & Clinical Immunol., 101-108	
0,2	(1991)	
C73	GOODWIN et al., Molecular cloning and Expression of the Type 1 and Type 2 Murine Receptors	
1 0,3	for Tumor Necrosis Factor, Molecular and Cellular Biology, 11:3020-3026 (1991)	
C74	GRAY et al, Cloning and Expression of cDNA for Human Lymphotoxin, a Lymphokine With	_
0,4	Tumour Necrosis Activity, Nature, 312:721-724 (1984)	
C75	GRUNDMANN et al., Characterization of cDNA Coding for Human Factor XIIIa, Proc. Natl. Acad.	
1 0/3	Sci. USA, 83:8024-8028 (1986)	
C76	HAAK-FRENDSCHO et al., Inhibition of TNF by a TNF Receptor Immunoadhesin, J. Immunol.,	
0,0	152:1347-1353 (1994)	
C77	HANNUM et al., Interleukin-1 Receptor Antagonist Activity of a Human Interleukin-1 Inhibitor,	
"	Nature, 343:336-340 (1990)	
C78	HEFLIN et al., Prevention by Granulocyte Depletion of Increased Vascular Permeability of Sheep	
0,0	Lung Following Endotoxemia, J. Clin. Invest., 68:1253-1260 (1981).	
C79	HIMMLER et al., Molecular Cloning and Expression of Human and Rat Tumor Necrosis Factor	
1019		
İ	Receptor Chain (p60) and Its Soluble Derivative, Tumor Necrosis Factor-Binding Protein, DNA and Cell Biology, 9:705-715 (1990)	
C80		
000	HOBART, The Immune System: A Course on the Molecular and Cellular Basis of immunity,	
C01	Blackwell Scientific Pubs, Page 7 (1975)	
C81	HOLTMANN et al., Down Regulation of the Receptors For Tumor Necrosis Factor By Intereukin 1	
	and 4β-Phorbol-12-Myristate-13-Acetate, J. Immunol., 139:1161-1167 (1987).	
C82	IDZERDA et al., Human Interleukin 4 Receptor Confers Biological Responsiveness And Defines	
	A Novel Receptor Superfamily, J. Exp. Med., 171:861-873 (1990)	
C83	IMAMURA et al., Expression Of Tumor Necrosis Factor Receptors On Human Monocytes And	
	Internalization Of Receptor Bound Ligand, J. Immunol., 139:2989-2992 (1987)	
caminer	Date	
ignature	Considered	

	Under the Paperwork	Reducti	on Act of 1995, no persons are req	U.S. Patent and Tra	PTO/SB/08a/b (08-03) pproved for use through 07/31/2006. OMB 0651-0031 idemark Office; U.S. DEPARTMENT OF COMMERCE f information unless it contains a valid OMB control number.	
Sut	estitute for form 1449A/B/PT	0		Complete if Known		
		_		Application Number	08/444,790-Conf. #5612	
11	NFORMATION	l DI	SCLOSURE	Filing Date	May 19, 1995	
S	TATEMENT E	3Y /	APPLICANT	First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
	(Use as many sh	eets as	s necessary)	Examiner Name	J. Murphy	
Sheet	5	of	8	Attorney Docket Number	01017/40451B	

C84	ISHIKURA et al., Differential Biologic Effects Resulting From Bimodal Binding of Recombinant	_
	Human Tumor Necrosis Factor to Myeloid Leukemia Cells, Blood, 73:419-424 (1989)	
C85	ISRAEL et al., Binding Of Human TNF-α To High-Affinity Cell Surface Receptors: Effect Of IFN, Immunology Letters, 12:217-224 (1986)	
C86	JACOBS et al., Pharmacokinetic Parameters and Biodistribution of Soluble Cytokine Receptors,	_
	International Review of Expermental Pathology, 34B:123-135 (1993)	_
C87	JONES et al, Structure of Tumour Necrosis Factor, Nature, 338:225-228 (1989)	
C88	KACZMARSKI et al., The Cytokine Receptor Superfamily, Blood Reviews, 5:193-203 (1991)	
C89	KAUSHANSKY, Structure-Function Relationships of the Hematopoietic Growth Factors, Proteins: Structure, Function & Genetics, 12:1-9 (1992)	
C90	KEEGAN et al., The Interleukin-4 Receptor: Signal Transduction by a Hematopoietin Receptor, Journal of Leukocyte Biology, 55:272-279 (1994)	_
C91	KEEGAN et al., Interleukin 4 Receptor: Signaling Mechanisms, Immunology Today, 15:423-432 (1994)	_
		_
C92	KLEINAU et al., Importance of CD23 for Collagen-Induced Arthritis: Delayed Onset and Reduced Severity in CD23-Deficient Mice, J. Immunol., 162:4266-4270 (1999)	
C93	KLINKERT et al., TNF-α Receptor Fusion Protein Prevents Experimental Auto-Immune	_
	Encephalomyelitis and Demyelination in Lewis Rats: an Overview, The Journal of	
	Neuroimmunology, 72:163-168 (1997)	
C94	KOHNO et al., A Second Tumor Necrosis Factor Receptor Gene Product Can Shed a Naturally	_
004	Occurring Tumor Necrosis Factor Inhibitor, Proc. Natl. Acad. Sci. USA, 87:8331-8335 (1990)	
C95	KRUSE et al., Conversion of Human Interleukin-4 Into a High Affinity Antagonist by a Single	_
	Amino Acid Replacement, The EMBO Journal, 11:3237-3244 (1992)	
C96	KULL et al., Cellular Receptor for 125 I-Labeled Tumor Necrosis Factor: Specific Binding, Affinity	-
	Labeling, and Relationship to Sensitivity, Proc. Natl. Acad. Sci. USA, 82:5756-5760 (1985)	
C97	LANDOLFI, A Chimeric IL-2/Ig Molecule Possesses The Functional Activity Of Both Proteins, J.	_
	Immunol., 146:915-919 (1991)	
C98	LANGNER et al., Structural and Functional Analysis of a TNF Receptor-Immunoglobulin Fusion	_
	Protein, New Advances on Cytokines, 349-354 (1992)	
C99	LEBERTHON et al., Enhanced Tumor Uptake of Macromolecules Induced by a Novel Vasoactive	_
	Interleukin 2 Immunoconjugate, Cancer Research, 51:2694-2698 (1991)	
C100	LESSLAUER et al., Recombinant Soluble Tumor Necrosis Factor Receptor Proteins Protect Mice	-
10.00	From Lipopolysaccharide-Induced Lethality, Eur. J. Immunol., 21:2883-2886 (1991)	
C101	LIABAKK et al., A Rapid and Sensitive Immunoassay for Tumor Necrosis Factor Using Magnetic	-
10.0.	Monodisperse Polymer Particles, Journal of Immunological Methods, 134:253-259 (1990)	
C102	LOETSCHER et al., Efficacy of a Chimeric TNFR-IgG Fusion Protein to Inhibit TNF Activity in	-
0102	Animal Models of Septic Shock, Endotoxin Research Series, 2:455-462 (1993)	
C103	LOETSCHER et al., Two distinct human TNF receptors: purification, molecular cloning and	-
10103	expression, in Tumor Necrosis Factor: Structure-Function Relationship and Clinical Application,	
	(3 rd International Conference	
C104	MALISZEWSKI et al., Cytokine Receptors And B Cell Functions: Recombinant Soluble Receptors	-
10104	Specifically Inhibit IL-1 and IL-4 Induced Cell Activities In Vitro, J. Immunol., 144:3028-3033	
	(1990)	
C105	MOHLER et al., Soluble Tumor Necrosis Factor (TNF) Receptors Are Effective Therapeutic	_
55	Agents in Lethal Endotoxemia and Function Simultaneously as Both TNF Carriers and TNF	
	Antagonists, J. Immunol., 151:1548-1561 (1993)	
C106	MORI et al., Attenuation of Collagen-Induced Arthritis in 55-kDa TNF Receptor Type 1 (TNFR1)-	-
1000	IgG1-Treated and TNFR1-Deficient Mice, J. Immunol., 157:3178-3182 (1996)	
i		
C107	MORRISSEY et al., Molecular Cloning of the cDNA for Tissue Factor, the Cellular Receptor for	_

Examiner	Date
Signature	Considered

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE spond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	08/444,790-Conf. #5612	
11	IFORMATION	I DI	SCLOSURE	Filing Date	May 19, 1995	
S	STATEMENT BY APPLICANT (Use as many sheets as necessary)			First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
				Examiner Name	J. Murphy	
Sheet	6	of	8	Attorney Docket Number	01017/40451B	

	C108	MORRISON, In Vitro Antibodies: Strategies for Production and Application, Annu. Rev. Immunol.,
<u> </u>	 	10:239-265 (1992)
	C109	MOSLEY et al., The Murine Interleukin-4 Receptor: Molecular Cloning and Characterization of Secreted and Membrane Bound Forms, Cell: 59:335-348 (1989)
	C110	NOVOTNY et al., A Soluble, Single-Chain T-Cell Receptor Fragment Endowed With Antigen-Combining Properties, Proc. Natl. Acad. Sci. USA, 88:8646-8650 (1991)
	C111	OKAYAMA et al., High-Efficiency Cloning of Full-Length cDNA, Molecular and Cellular Biology, 2:161-170 (1982)
	C112	OKAYAMA et al., A cDNA Cloning Vector That Permits Expression of cDNA Inserts in Mammalian Cells, Molecular and Cellular Biology, 3:280-289 (1983)
	C113	OLD, Tumor Necrosis Factor, 2nd Intl Conference on Tumor Necrosis Factor & Related Cytokines, Napa, CA, 1-30 (1989)
	C114	PABORSKY et al., Purification of Recombinant Human Tissue Factor, Biochemistry, 28:8072-8077 (1989)
	C115	PARRILLO, Pathogenetic Mechanisms of Septic Shock, New Eng. J. Med., 328:1471-1477 (1993)
	C116	PEETRE et al., A Tumor Necrosis Factor Binding Protein is Present in Human Biological Fluids, Eur. J. Haematol. 41:414-419 (1988)
	C117	PENNICA et al., Human Tumour Necrosis Factor: Precursor Structure, Expression and Homology to Lymphotoxin, Nature, 312:724-729 (1984).
	C118	PIGUET et al., Evolution of Collagen Arthritis in Mice is Arrested by Treatment With Anti-Tumor Necrosis (TNF) Antibody or a Recombinant Soluble TNF Receptor, Immunology, 77 (4):510-514 (1992)
	C119	REDFIELD et al., Secondary Structure and Topology of Human Interleukin 4 in Solution, Biochemistry, 30:11029-11035 (1991)
	C120	RUBIN, Binding Receptor Characters Zako and Expression, and Intracellular Events. 2nd Intl Conference on Tumor Necrosis Factor & Related Cytokines, Napa, CA, 94-96 (1989)
	C121	RUDDLE et al., An Antibody to Lymphotoxin and Tumor Necrosis Factor Prevents Transfer of Experimental Allergic Encephalomyelitis, J. Exp. Med., 172:1193-1200 (1990)
	C122	RUTKA et al., The Effects of Human Recombinant Tumor Necrosis Factor on Glioma-Derived Cell Lines: Cellular Proliferation, Cytotoxicity, Morphological and Radioreceptor Studies, Int. J. Cancer., 41:573-582 (1988)
	C123	SAXNE et al., Detection of Tumor Necrosis Factor α But Not Tumor Necrosis Factor β in Rheumatoid Arthritis Synovial Fluid and Serum, Arthritis & Rheumatism, 31:1041-1045 (1988)
	C124	SCALLON et al., Functional Comparisons Of Different Tumour Necrosis Factor Receptor/lgG Fusion Proteins, Cytokine, 7:759-770 (1995)
	C125	SCARPATI et al., Human Tissue Factor: cDNA Sequence and Chromosome Localization of the Gene, Biochemistry, 26:5234-5238 (1987)
	C126	SCHLEIFFENBAUM et al., The Tumor Necrosis Factor Receptor and Human Neutrophil Function, J. Clin. Invest., 86:184-195 (1990)
	C127	SCHNEE et al., Construction and Expression of a Recombinant Antibody-Targeted Plasminogen Activator, Proc. Natl. Acad. Sci. USA, 84:6904-6908 (1987)
	C128	SECKINGER et al., A Human Inhibitor Of Tumor Necrosis Factor α, J. Exp. Med. 167:1511-1516 (1988)
	C129	SHALABY et al., Receptor Binding and Activation of Polmorphonuclear Neutrophils by Tumor Necrosis Factor-Alpha, Journal of Leukocyte Biology, 41:196-204 (1987)
	C130	SHALABY et al., Binding and Regulation of Cellular Function by Monoclonal antibodies Against Human Tumor Necrosis Factor Receptors, J. Exp. Med. 172: 1517-1520 (1990)
	C131	SHEEHAN et al., Generation and Characterization of Hamster Monoclonal Antibodies That Neutralize Murine Tumor Necrosis Factors, Journal of Immunology, 142:3884-3893 (1989)

Examiner	Date	
Signature	Considered	

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	08/444,790-Conf. #5612	
IN	IFORMATION	l Di	SCLOSURE	Filing Date	May 19, 1995	
STATEMENT BY APPLICANT (Use as many sheets as necessary)				First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
				Examiner Name	J. Murphy	
Sheet	7	of	8	Attorney Docket Number	01017/40451B	

C132	SHIN et al., Expression and Characterization of an Antibody Binding Specificity Joined to Insulin-
	Like Growth Factor 1: Potential Applications for Cellular Targeting, Proc. Natl. Acad. Sci., 87:5322-5326 (1990)
C133	SIMS et al., cDNA Expression Cloning of the IL-1 Receptor, a Member of the Immunoglobulin
	Superfamily, Science, 241:585-589 (1988).
C134	SIMS et al., Cloning the Interleukin 1 Receptor From Human T Cells, Proc. Natl. Acad. Sci.,
C135	86:8946-8950 (1989) SMITH et al., The Active Form of Tumor Necrosis Factor Is a Trimer, J. Biol. Chem., 262:6951-
0133	6954 (1987)
C136	SMITH et al., Blocking of HIV-1 Infectivity by a Soluble, Secreted Form of the CD4 Antigen,
	Science, 238:1704-1707 (1987)
C137	SMITH et al., Multimeric Structure of the Tumor Necrosis Factor Receptor of HeLa Cells, J. Biol. Chem., 264:14646-14652 (1989)
C138	SPICER et al., Isolation of cDNA Clones Coding for Human Tissue Factor: Primary Structure of the Protein and cDNA, Proc. Natl. Acad. Sci., 84:5148-5152 (1987)
C139	STAINES et al., Collagen Arthritis-What Can It Teach Us?, British Journal of Rheumatology, 33:798-807 (1994)
C140	STRADER et al., Structural Basis of β-Adrenergic Receptor Function, The FASEB Journal, 3:1825-1832 (1989)
C141	SUGGS et al., Use of Synthetic Oligonucleotides as Hybridization Probes: Isolation of Cloned
	cDNA Sequences for Human β ₂ ,-Microglobulin, Proc. Natl. Acad. Sci. U.S.A., 78:6613-6617
	(1981)
C142	TAUBER et al., Toxicity in Neuronal Cells Caused by Cererospinal Fluid fFom Pneumococcal and
	Gram-Negative Meningitis, The Journal of Infectious Diseases, 166:1045-1050 (1992)
C143	THOMA et al., Identification of a 60-kD Tumor Necosis Factor (TNF) Receptor as the Major
	Signal Transducing Component in TNF Responses, J. Exp. Med. 172: 1019-23 (1990)
C144	TSUJIMOTO et al., Characterization and Affinity Crosslinking of Receptors for Tumor Necrosis Factor on Human Cells, Archives of Biochemistry and Biophysics, 249:563-568 (1986)
C145	TSUJIMOTO et al, Interferon-γ Enhances Expression of Cellular Receptors for Tumor Necrosis
	Factor, J. Immunol., 136:2441-2444 (1986)
C146	TSUJIMOTO et al, Tumor necrosis factor: specific binding and internalization in sensitive and resistant cells, Proc. Natl. Acad. Sci. 82: 7626-30 (1985)
C147	ULICH et al., Intratracheal Administration of Endotoxin and Cytokines, Clinical Immunology & Immunopathology., 72:137-140 (1994)
C148	UNGLAUB et al., Downregulation of Tumor Necrosis Factor (TNF) Sensitivity Via Modulation of TNF Binding Capacity by Protein Kinase C Activators, J. Exp. Med. 166:1788-1797 (1987)
C149	VAN DER POLL et al., Pretreatment with a 55-kDa Tumor Necrosis Factor Receptor-
	Immunoglobulin Fusion Protein Attenuates Activation of Coagulation, but not of Fibrinolysis,
	during Lethal Bacteremia in Baboons, The Journal of Infectious Diseases., 176:296-299 (1997)
C150	VAN ZEE et al., Protection Against Lethal Escherichia coli Bacteremia in Baboons (Papio anubis)
	by Pretreatment With a 55-kDa TNF Receptor (CD120a)-lg Fusion Protein, Ro 45-2081, J.
0454	Immunol., 156:2221-2230 (1996)
C151	WALLACH et al., Soluble and Cell Surface Receptors for Tumor Necrosis Factor, Progress, Inflammation Research & Therapy, 51-57 (1991)
C152	WALLACH et al., Cell surface and soluble TNF receptors, in Tumor Necrosis Factor: Structure-
	Function Relationship and Clinical Application, (3 rd International Conference on Tumor Necrosis
	Factor and Related Cytokines, Makuhari, Chiba, Nov. 21-25, 1990), Osawa and Bonavida, eds.,
	Basel, Karger, pp 47-57 (1992) WILKS, The CD4 Receptor: Post Binding Events, Conformational Change and the Second Site,
C153	

Examiner	Date	
Signature	Considered	

PTO/SB/08a/b (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/B/PTO				Complete if Known		
				Application Number	08/444,790-Conf. #5612	
11	NFORMATION	N DI	SCLOSURE	Filing Date	May 19, 1995	
S	STATEMENT BY APPLICANT			First Named Inventor	Manfred Brockhaus	
				Art Unit	1646	
	(Use as many sheets as necessary)			Examiner Name	J. Murphy	
Sheet	8	of	8	Attorney Docket Number	01017/40451B	

C154	YAMASAKI et al., Cloning and Expression of the Human Interleukin-6 (BSF-2/IFNβ 2) Receptor, Science, 241:825-282 (1988).	
C155	YONEHARA et al., A Cell-Killing Monoclonal Antibody (Anti-Fas) to a Cell Surface Antigen Co- Downregulated With the Receptor of Tumor Necrosis Factor, J. Exp. Med., 169:1747-1765 (1989)	
C156	YOSHIE et al., Binding and Crosslinking of ¹²⁵ I-Labeled Recombinant Human Tumor Necrosis Factor to Cell Surface Receptors, J. Biochem., 100: 531-541(1986)	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Examiner	Date	
Signature	Considered	

^{&#}x27;Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.